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# Preventing Emergency Department Overutilization for Florida's Seasonal Resident Population

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Preventing Emergency Department Overutilization for Florida's Seasonal Resident Population

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### Abstract

**Background/Local Problem:** Seasonal migration of elderly patients to Lee County, Florida result in overcrowding and prolonged wait times in emergency departments. Many of these seasonal residents dissociate the management of their chronic health conditions with a local provider, therefore utilizing the emergency department for non-urgent needs. **Purpose:** The Seasonal Resident Navigator Program was intended to enhance the coordination of primary care services for elderly seasonal residents by establishing appointments with local primary care providers (PCP) in order to reduce the overutilization of emergency services and improve patient throughput. **Methods:** A residency and provider assessment tool was incorporated into the Healthpark Medical Center Emergency Department (ED) nurse triage workflow between November 2017-February 2018 in order to identify seasonal residents, age 65 or greater, without an assigned local provider and facilitate proper follow up appointments. **Interventions:** The percentage of all seasonal resident encounters at Healthpark Medical Center ED pre-and-post intervention were evaluated as well as the percentage of all seasonal residents that maintained their assigned PCP follow up appointment. Open commentary from patients was evaluated to identify perceived barriers from outpatient follow up. **Results/Conclusion:** The Seasonal Resident Navigator program will contribute to future trends in emergency department utilization and seasonal resident access to care through enhanced coordination between the acute care and primary care sector.

Keywords: overcrowding, avoidable use, emergency department, Florida, seasonal resident, primary care physician, navigator

## **Problem**

Lee County flourishes as a retirement and tourist mecca in Southwest Florida. During the 2017 winter season, 1.3 million visitors flocked to the area increasing the area's population by nearly 22% (LCVCB, 2016). Yet, many seasonal residents dissociate the management of their chronic health conditions with a local provider, since they are followed by a provider in their state of primary residence. The annual surge of seasonal residents and visitors creates a significant increase in patient volumes leading to overcrowding and prolonged wait times in local emergency departments (Figure 1). The high census places a significant strain on the available resources of the health system and overall quality of care offered during peak season.

According to Smith & House (2006) as well as Conway & Rork (2016), the migration trends of seasonal residents are often very difficult to quantitatively monitor. Therefore, they are minimally studied when evaluating seasonal residency changes classified as seasonal or temporary residency. Since there is no present literature presenting data on the seasonal migration patterns of the elderly, it creates barriers when trying to assess the impact on health care systems. Florida, however, has long been identified as the most population dense state with seasonal elderly residents in the United States (Longino & Bradley, 2003). With such a dense population of seasonal residents in the winter months, the elderly patients account for nearly 25% of all ED patient encounters (Gulacti, Lok, Celik, Aktas, & Polat, 2016; Legramante et al., 2016; Seaberg et al., 2017).

Identifying and removing barriers that impact patients' timely access to quality healthcare is imperative in facilitating patient flow and capacity management through a patient-centric care system. Delays in treatment modalities or failure to provide appropriate care places patients at high risk for harm or sub-optimal care (Richardson, Asplin, & Low, 2002). It also decreases the

likelihood of patients coordinating and maintaining appropriate follow up. It is the purpose of this quality improvement project to enhance the coordination of primary care services for elderly seasonal residents by establishing appointments with local primary care providers (PCP) in order to reduce the overutilization of emergency services and identify perceived barriers to outpatient follow up.

### **Available Knowledge**

The New England Health Institute's seminal report on *Waste and Inefficiency in the Health Care System-Clinical Care: A Comprehensive Analysis in Support of System-wide Improvements* identified six major sources of waste in health care spending, and emergency department overuse was the fourth largest category responsible for up to \$38 billion each year in the United States (NEHI, 2010). Non-urgent care or patient care conditions that could have been prevented or managed by a primary care physician fall into the category of avoidable use and encompass a significant portion of ED visits each year. Non-urgent care or avoidable ED use is highly problematic for both patients and payers increasing costs to healthcare systems, draining resources, and decreasing the quality of care provided to patients. The traditional ED setting is not essentially designed for providing the continuity of care that can be delivered through a primary care provider (PCP) especially for high risk populations or those suffering from chronic health conditions.

Patients utilize the emergency department for a wide variety of medical services. More individuals access emergency departments (ED) for non-urgent or primary care services that could be appropriated to an outpatient facility or physician office. According to the New England Healthcare Institute (2008), 56% or roughly 67 million visits could be avoided each year in the

United States. With an increase in utilization of services, overcrowding has become a multifactorial problem worldwide and a major public health issue resulting in increased costs, prolonged length of stay (LOS), repeated ED visits, denounced quality of care, and patient dissatisfaction (Erenler et. Al, 2014). An estimated 13% to 27% of emergency department (ED) visits in the United States could be redirected to the outpatient sector at a savings of \$4.4 billion annually (Weinick, Burns, & Mehrotra, 2010).

Emergency department utilization has been assessed for prevalence and over consumption, however there are minimal published studies regarding avoidable usage by elderly residents. Uscher-Pines et al (2013) systematic review of the literature found that 37% of all ED visits are considered non-urgent, and additional studies reported as much as 40% of inappropriate usage related to difficulty in accessing a primary care provider (Carret, Fassa, & Domingues, 2009). The National Hospital Ambulatory Medical Care Survey reports that 4.4% of ED visits made by the elderly were non-urgent (Hing, Hall, Ashman, 2010). (Faulkner & Law, 2015) reported an ED triage category of 4 or 5 for most elderly patients that could be circumvented through community physicians had the appropriate resources been established. (Gulacti et al, 2016) reported the proportion of non-urgent ED visits amongst elderly patients to be 23.4% of all ED visits.

Although ED's are often the most accessible site for initial assessment and intervention, elderly patients often utilize the vast services for non-urgent conditions. Total ED visits for patients ages 65-74 have been reported higher than any other age group especially during the winter months (Unsal et al, 2009; Keskinoglu & Inan, 2014). This overutilization creates the potential risk for compromising the treatment and intervention of other true emergencies (Carret, 2009).

Rust et al (2008) identified the elderly as a high-risk population for potential adverse events related to the increased frequency of ED visits in relation to the impact of overcrowding. The occurrence of adverse events was found to be statistically significant for patients age 65 or greater who experienced an increased length of stay. Keskinoglu & Inan (2014) supports the data indicating a significantly higher rate of admission and increased length of stay for the elderly population.

Lee County, Florida is no different in the attempt to manage heavy demand for healthcare services to the elderly population. According to US Census Bureau Statistics (2016), 722, 336 residents claim Lee County, Florida as their primary residence each year. Nearly 27.4% of these residents are 65 years old or greater in comparison to 17.6% of the state's population. However, these statistics greatly increase during the winter season each year when "flocks" of seasonal residents transcend and stake claim to the available health resources in order to manage their many chronic health conditions. During the 2017 season, there were over 39,000 additional patients encounters in the ED by patients identified as "seasonal residents" through the registration of primary out of state residence during the months of January through April (Lee Health Financial Services, 2017).

Utilizing the resources of the ED for non-urgent conditions results in increased costs, fragmentation of care, and limitations in caring for true emergencies. Therefore, extensive work has been published regarding the transition of care between ED and PCP. The Agency for Healthcare Research and Quality (2015) advised reducing ED utilization through coordinated efforts with primary care providers (PCP). Current literature supports interventions to improve access to care in order to continue providing cost-effective health care delivery systems and reduce ED overcrowding (Finta et al, 2017). NEHI (2010) strategized redesigning the workforce



to actively foster a collaborative relationship between the hospital and community provider. Patient navigators or primary care coordinators in the ED may help facilitate coordination of primary care services as well as decrease perceived barriers to access. Patient navigation has further developed to promote efficient movement of patients across the health care continuum while reducing barriers related to communication, knowledge deficit, and financial assistance (Dohan & Schrag, 2005; Freeman & Rodriguez, 2011). (Enard & Ganelin, 2013) evaluated a patient navigation program designed to reduce ED overutilization and promote access to primary care providers. This study found that the patient navigation program was associated with decreased returns visits to the ED resulting in significant cost savings to the health system. Thiissen et al (2016) reviewed 7,000 ED records and identified a reduction in LOS for ED patients with frequent visits through the development of a risk assessment that integrated the assignment of a PCP into the ED care plan. Atzema & MacLagan (2017) report in their scoping study that the most frequently identified predictor for increasing the frequency of follow-up care was by providing a follow-up appointment time prior to ED departure. Additional studies have demonstrated that repeat ED visitors may have periodic contact with a primary care provider, however this data is limited since there is no way to identify and track PCP encounters when seasonal residents return to their primary residence.

### **Rationale**

Efficiency is crucial in the ED to providing high quality access to care as well as ensuring patient and employee satisfaction. It is a key initiative in monitoring for quality, safety, and fiscal responsibility. The Seasonal Resident Navigator program will contribute to future trends in emergency department utilization and seasonal resident access to care in many ways. First, it recognized the implementation of an ED based assessment tool to assist in quantifying the

number of unassigned seasonal residents within Lee County. Second, it promoted communication to the elderly seasonal resident population in order to identify potential barriers related to access to outpatient care. Third, it examined the project's impact on the odds of any post-implementation ED visits taking place and the changes in pre/post utilization among patients with post-implementation PCP visits.

The systematic review of the literature supports optimizing ED utilization by refocusing non-urgent patients to the outpatient sector through use of a PCP. The literature revealed that restructuring the patient's perception of self-care and access to appropriate medical assistance is essential in transitioning patients into a more autonomous role. Elderly patients with chronic comorbidities are often reliant on the ED as a primary means of self-care to manage these complex conditions. However, understanding the limitations in meeting self-care needs is essential in reducing ED encounters. Factors contributing to preventable ED encounters include inadequate education, failure to seek appropriate medical care, and patient perceptions of the ability to gain access to services (Agency for Healthcare Research and Quality; 2017).

Orem's self-care deficit theory is fundamental in addressing patient challenges to maintaining self-care. This theory includes: the theory of self-care, theory of self-care deficient, and the theory of nursing system. Orem describes health deviation self-care when a person modifies self-concepts based upon a particular condition or state of health as well as having the awareness of attending to these conditions. Self-care deficits indicate the point in which nursing care is required as an intervention. The literature indicates that elderly residents underutilize primary services, and seasonal residents, in particular, depict an even more complex coordinated care model between their primary and secondary residences.

### **Specific Aims**

The collaborative quality improvement project was conducted to determine whether identification of seasonal residents with ED encounters during the intervention time frame and assignment of a local PCP would reduce ED utilization for non-urgent conditions. The Seasonal Resident Navigator Program addressed the overutilization of emergency department services during peak volumes and its impact on the health service delivery of the elderly seasonal resident population. It fostered a collaborative interdisciplinary effort to assign local providers and monitor patient compliance with follow up appointments through the electronic medical record as well as describe barriers to patients lost to follow up. The primary goal of this DNP project was to quantify the number of seasonal residents without local primary care resources and facilitate a coordinated care effort to promote self-management of health among these elderly patients and address their perceived barriers to reduce future ED utilization.

It was expected that this program would decrease seasonal resident utilization of the emergency department during winter months (November-January) and increase the number of patients with assigned local providers during their interim stay. Program success was measured by a reduction in ED encounters by seasonal residents and patient compliance with outpatient provider visits.

### **Context**

Lee Health is the largest public, not-for-profit health system in the state of Florida comprised of four adult acute care campuses and nearly 1,426 licensed beds. The health system attracts high volumes of seasonal residents with more than 1 million patient contacts each year. During the 2016-2017 winter season, Healthpark Medical Center provided the majority of

emergency services (36%) for the health system's seasonal resident population in their 22-bed emergency department which averages 210 patient encounters daily.

In order to facilitate appropriate discharge follow-up, the Lee Physician Group Primary Care program works in conjunction with acute care to strategically coordinate patients with primary care physicians and specialists to meet their outpatient healthcare needs. However, with over 38,000 additional contacts during the winter season, an increased effort was needed to provide contact to the elderly seeking non-urgent medical care through frequent ED visits. In 2017, Patient Access Schedulers were strategically placed in all 4 adult ED's within Lee Health to facilitate follow up appointments for patients upon request of the ED physician or patient. The department lacked any proactive measures to identify at risk elderly seasonal residents or compliance with outpatient follow up. Data collection regarding patient demographics has existed through subjective patient response during initial ED registration in the electronic medical record, however priority has little to never been placed on seasonal residency status or identification of a local PCP opposed to a PCP within the state of primary residence.

A significant barrier identified within the Healthpark ED was the consistency of data collection since priority clinical evaluation and charting requirements superseded the documentation of residency and provider status. Without proper patient education, these questions were often declined to answer by patients during their initial triage assessment. Also, electronic access restrictions limited the Patient Access Schedulers from viewing ED patients' residency and provider status in order to facilitate follow up. Instead, the Schedulers relied on real-time communication from the triage nurse or referral by the ED physician to identify patients needing PCP assignment.

## **Intervention**

The Seasonal Resident Navigator Program was designed based upon three assumptions. The first is the belief that an assessment tool would result in reduced emergency department utilization. The second was that utilization would further decline as the assessment tool gained momentum from staff and was properly delegated to the LPG Patient Access Schedulers. The final assumption was the awareness that not all residents would be fully captured by this tool based upon their subjective classification as a permanent or temporary seasonal resident. In addition, based upon temporary status, some follow up data would be lost if the patient elected to follow up with an out of network provider that was not reportable in the electronic medical record. The project design was qualitative and intended to establish reoccurring themes among the project participants. The PDCA framework was utilized to manage the project timeline. Prior to initiating the Seasonal Resident Assessment Tool, facilitated meetings were held with key stakeholders including ED nursing staff, Information System Project Team, and Patient Access team in order to identify process steps, facilitators, and barriers. Residency class data was collected for patients identified with a temporary address who presented to the ED between November 2016 and January 2017. After review, Healthpark Medical Center was selected as the pilot campus having the largest volume of seasonal resident encounters during the prior season.

The Seasonal Resident Navigator Assessment Tool (Appendix A) was designed and approved by the ED Leadership Council for approval of the pilot process improvement program. The tool design and mock workflow was presented to the IT Project Coordinator for final approval and build into the electronic medical record. Education on utilization and

documentation compliance was disseminated to the ED nursing team through department staff meetings and an EPIC training alert (Appendix B) prior to implementation.

During November 1, 2017-January 31, 2018, all patients that presented to the Healthpark Medical Center ED were eligible for assessment of the following questions: (1) Are you a temporary/seasonal resident? (2) What is your approximate length of stay (0-3 months), (3-6 months), or (6-9 months) (3) Do you have a PCP in Lee County? The triage nurse provided direct communication with the Patient Access Schedulers regarding patients with a “yes” response to question (1) and “no” to question (2). Only patients eligible for discharge from the ED were considered for inclusion and follow up by the Patient Access Schedulers. Follow up calls were then made to each patient 48 hours prior to the scheduled follow up appointment as well as 24 hours prior to appointment if not reached on the initial call. Only patients scheduled with Lee Physician Group providers for discharge follow up appointments were eligible for compliance tracking through shared EPIC patient records reporting.

### **Study of the Interventions**

The Seasonal Resident Navigator Assessment Tool was designed to quantify the population of seasonal residents seeking care at Healthpark ED. The assessment tool included closed-ended questions on demographics including patient residency status, length of stay, and establishment of PCP. Open-ended feedback was elicited from patients that declined follow up to qualify the dissociation of local care services for patients lost to follow up. At the close of the study period, all charts were assessed for ED encounters, patient compliance with follow up appointments, and the rate of return post intervention to the ED.

### **Measures**

The study group was comprised of patients aged 65 or over who had an encounter in the Healthpark ED between November 1, 2017 and January 31, 2018. The assessment tool was designed to collect current primary care data of elderly seasonal residents and their perspectives on local follow up care during temporary residence in order to identify factors related to ED utilization. Only patients discharged from the ED were considered for evaluation. A retrospective chart review was conducted of all of patients seen in the Healthpark ED during the intervention period. Follow up appointments were evaluated for compliance. patient encounters were quantified to assess rate of return to the ED during the intervention period after being provided a follow up appointment with a local PCP. Descriptive statistics were used to evaluate patients that declined follow up for trends in ED utilization and seasonal residency status.

### **Ethical Considerations**

This work represents a quality improvement project focused on clinical processes and does not jeopardize the well-being of any human subjects. All participants were protected under the Health Insurance Portability and Accountability Act of 1996 (HIPAA) (Modifications to the HIPAA Privacy, Security, Enforcement, and Breach Notification Rules, 2013). Additionally, the DNP student and project team who coordinated this project followed the Standards of Care for practice in the hospital setting. All information collected as part of evaluating the impact of this project was aggregated data from the project participants and did not include any patient identifiers. There was no clinical intervention posing risk to the included participants. All personal health information was stored on secure servers, and data that has already been collected was submitted in a de-identified format. All records reviewed by the DNP student during the project were de-identified. Prior to initiation of the project, Lee Health Nursing

Research Council (NRC) and Institutional Review Committee (IRC) as well as University of New Hampshire Institutional Review Board (IRB) granted approval concluding that the project was a quality improvement project and not research.

## **Results**

Over the course of this initiative, three hundred and ninety-five patient encounters met criteria. Three hundred and forty-three patients reported their estimated length of seasonal residence in Florida as follows: 46% (n= 158) reported 0-3 month stay; 46% (n=119) also reported 3-6 month stay; 8% (n=26) reported 6-9 month stay (Figure 3). The Patient Access Schedulers made contact with two hundred and thirty-one patients that met criteria for seasonal residence with no local PCP. Outpatient PCP visits were offered, and patients were tracked for appointment establishment and compliance with follow up. In total, 28% (n=111) of patients that complied with scheduling an appointment with a local PCP, and 15% (n=60) completed their appointment. The electronic medical record was then reviewed for any return encounters to the ED post PCP appointment. Zero patients returned yielding a 15% decrease in ED utilization by seasonal residents. Of the 12,460 Healthpark ED patient encounters during the intervention period, 44% (n=5,571) were age 65 or greater, and 11% (n=1,316) identified themselves as seasonal residents. Of that population group, 668 patients were identified as seasonal residents aged 65 or greater who declined having a local PCP. Only 60% (n=395) reported no local PCP and were eligible for discharge related to a non-urgent condition. All excluded patients were admitted to the hospital (n=266). Only 7 patients left without being seen by a provider and were lost to follow up. Unfortunately, 12% (n=700) of patient encounters lacked response to the assessment tool either through patient refusal or ED nursing staff omission.



The open-ended feedback received from seasonal residents that declined follow up were evaluated for trends. The recurring themes from the one hundred and twenty patients refusing follow up included: (Figure 2): (1) Established with out of network PCP, (2) Insurance restrictions, (3) Lack of transportation, (4) Seasonal residency status with out of state PCP, (5) Hospital admission, (6) Unable to reach patient provider. Interestingly, 19% (n=22) of patients refusing local follow up deferred to their out of state provider for primary care services post return to their primary state of residence.

### **Summary**

The Seasonal Resident Navigator Program had four specific aims:

- Quantify the number of seasonal residents without local primary care resources
- Facilitate outpatient follow up care through appointments with local PCP
- Reduce non-urgent ED utilization by seasonal residents
- Identify patient perceptions of barriers to self-management through local PCP's

The first aim was to evaluate the overall ED utilization data within Healthpark Medical Center. This aim was achieved through design, production, and implementation of the Seasonal Resident Navigator Assessment Tool into the electronic medical record. The tool developed the basis for data collection and analysis along with education to key stakeholders on documentation standards and contributions to work. ED overcrowding, prolonged patient wait times, and employee and patient dissatisfaction were the primary motivators for initiation of the project.

The second aim of the project was to create opportunity to improve outpatient establishment with local PCP's through open access appointments following ED discharge disposition. This aim was accomplished through increased collaboration and communication of the ED triage nurse and Patient Access Schedulers to identify patients through the Seasonal

Resident Navigator Assessment Tool and frequent patient contact prior to departure from the ED by the Patient Access Scheduler.

The third aim, reducing ED utilization of return visits post intervention, was not an intervention in itself but instead an effect of the success of the second aim. Data from the Seasonal Resident Navigator Assessment Tool and a report of all patient encounters during the intervention period was collected and analyzed for a reduction in patient returns to the ED post follow up visit with the local PCP. The project revealed a “0” rate of return for all patients that complied with follow up during the intervention time frame.

The fourth aim was to address the impact from the open-ended feedback. While the aim was achieved, the intent behind setting this goal was to be able to find trends in patient perceptions in an effort to make recommendations for future practice. Due to limited impact on external factors such as out of network PCP and insurance authorization, the data was limited to local resource collaborations and payer source index. However, this information did support the importance of identifying patient perceptions to barriers impacting patient access to care.

### **Interpretation**

After implementation of the quality improvement project, 15% (n=60) of elderly seasonal residents were appropriately established with local PCP's and had a zero rate of return to the Healthpark ED. Although this may appear as a small impact group in comparison to the 12,460 total encounters, this represents a subset of a high-risk population for potential adverse events related to increased ED visit frequency. This percentage also represents a growing population with increased ownership of self-care. The data reflects the New England Healthcare Institute's

(2010) research findings on reducing ED overutilization through the use of open access scheduling and patient outreach coordination as well as the root cause analysis identifying timely access to patient care services as a cause of ED overuse. After review of the open-ended feedback from patients declining follow up care, 19% (n=22) of patients still perceived their out of state PCP as their sole access to primary care services and 9% (n=10) were unable to gain access to care either by appointment unavailability or insufficient payer source.

### **Limitations**

Several limitations were identified during the implementation and analysis of this quality improvement project. The ED visits were not longitudinal but rather snapshots comparing encounters of peak historical seasonal trends. ED visits in response to the program could have occurred after the conclusion of the intervention time frame as indicated in the subjectivity of seasonal resident length of stay or visits at alternative institutions within the area. Only encounters at Healthpark Medical Center ED were evaluated post appointment. In addition, it is uncertain and likely context-dependent as to the “correct” number of ED visits by any patient. This may limit generalizability based upon chief complaint or diagnosis which was not evaluated in this project although the consistently low rate of return ED visits and non-urgent conditions in the literature should reduce concerns related to linkage to eligible discharge criteria. We also did not evaluate possible modifiers of effect of factors such as size of ED, number of triage nurses, number of Patient Access Schedulers, or number of available PCP follow up appointments.

There were no process measures of how often the triage nurse defined temporary or seasonal residency to patients and how often patients understood the classification of seasonal residency. Additionally, the Patient Access Schedulers provided no educational context to patients regarding the priority or clinical benefit of establishing and maintain follow up care for

patients. Discharge teaching still remained a responsibility of the ED nursing staff and was not evaluated in this project or its potential impact on patient compliance with follow up care.

The program also lacked process measures and data to quantify how often patients who declined initial follow up appointments but elected independent follow through with appointment scheduling may have self-managed establishing a local PCP. Our chart review for the reasons patients refused follow up appointments did not include a validated classification tool.

Of importance, the project intended to share access to data from the Seasonal Resident Navigator Assessment Tool with the Patient Access Scheduler team. However, access to this population of employees was restricted due to insufficient production time in the electronic medical record. It is believed that if this role gained access to this data in the electronic medical record rather than by verbal communication from the triage nurse staff, the rate of patient contact to establish appointments would have increased.

Finally, a systematic audit of all patient follow-up appointments was not conducted, thus some inaccuracies in reporting may be present. Only patients scheduled to follow up with Lee Physician Group providers were auditable in the electronic medical records. Follow up rates with out of network/out of area PCP's could not be verified. Therefore, the quantitative evaluation underestimated the effects of the program.

### **Conclusions**

The outcomes achieved through this quality improvement project have been influential in optimizing efficiency in the ED through shared governance to reduce overcapacity and improve patient outcomes. Data collection was vital to producing evidence-based quality outcomes as well as to support the current role design of Patient Access Schedulers for appointment

scheduling. The Seasonal Resident Navigator Tool provided a means of quantifying a subset of population that has a large impact on seasonal hospital census trends.

The sustainability of the Seasonal Resident Navigator tool is reliant on the buy-in of the ED team to continue to track seasonal residents during the winter months. The outcomes of this project indicate that continued evaluation of patient compliance with outpatient follow up is beneficial in identifying and tracking patients with extensive ED visits and establishing specific metrics on barriers to access PCP appointments. A priority moving forward is to enable access to the data in the electronic medical record to the Patient Access team for sharing of pertinent information. Support for ongoing data collection would influence outcomes leading to a reduction in ED overutilization and stabilization of ED capacity management. Modifications of this tool could enable evaluation of other identified high-risk populations to promote self-care and collaboration with outpatient providers.

There are multiple opportunities identified through this project for continued quality improvement. Further strategy in data collection and analysis uses previous ED use and additional healthcare points of contact across a health system to identify patients who are likely to make ED visits in the future (NEHI,2010). Predictive modeling would build upon the current tool and establish additional roles for the Patient Access team to coordinate follow up evaluations with patients to reduce ED occurrence. Although some of the strategies identified such as patient access coordination and open access scheduling will be effective for all patient populations, it is important that future strategies be targeted specifically to each variance in seasonal population trends driving emergency department utilization. Linking patients with appropriate outpatient services would then decrease future use for non-urgent needs.

In conclusion, overutilization of the ED for non-urgent or avoidable conditions places a strain on both the quality and affordability of Healthcare in the United States. Hospitals are earnestly examining the process of capacity management related to emergency department utilization and implementing quality improvement projects aimed at facilitating patient management of chronic health conditions through collaboration with outpatient providers. While patient outreach and PCP assignment have shown to reduce emergency department utilization for seasonal residents, findings also suggest hospitals might find increased success through care collaboration with out of network providers. Efforts are dependent upon sustained interdisciplinary commitment of front line teams in particular nurses and improved data collection efforts on ED utilization to promote meaningful intervention. Although the current primary care reimbursement system does not encourage metrics to reduce avoidable visits, future trends towards pay-for-performance and value-based care may identify metrics to reward providers who invest in reduction strategies. By taking steps to establish lasting collaborative relationships between ED staff and the PCP network, healthcare system can help to eliminate non-urgent ED utilization and promote means of self-care to the elderly seasonal resident population.

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No funding was generated nor used to support this project.

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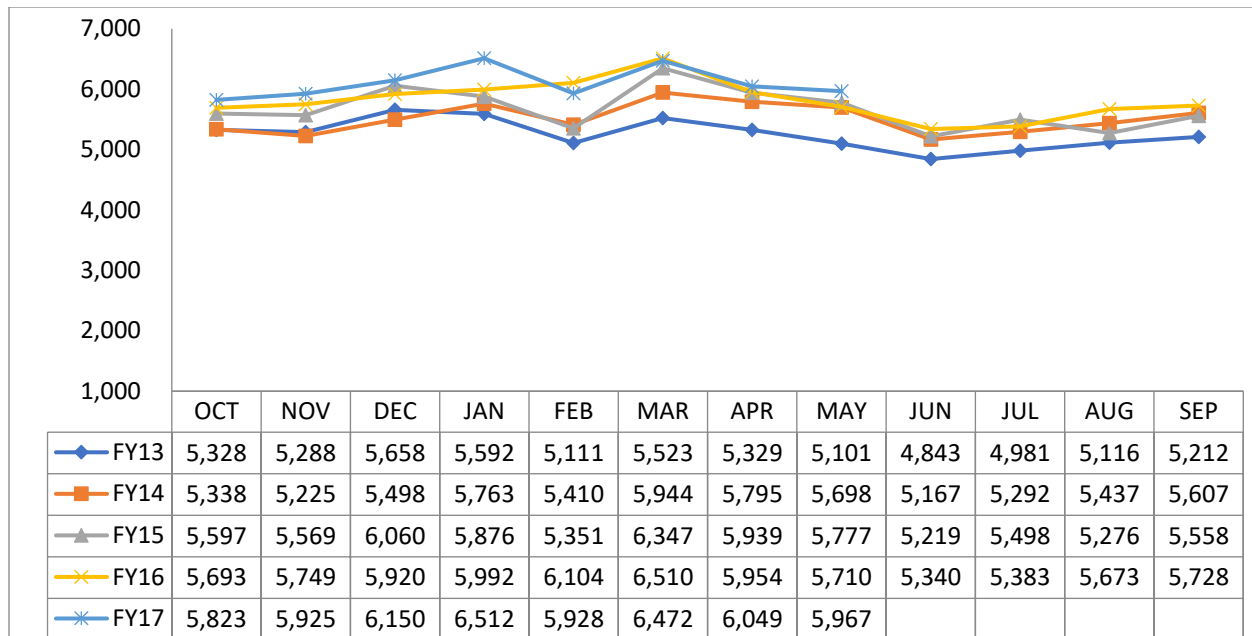
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Figure 1. Historical Snapshot Seasonal Trends



## Appendix A. Seasonal Resident Navigator Assessment Tool

8/25/2017 visit for Hospital Encounter

Refresh Navigators Tx Team References Pt Care Links Questionnaires Images FYI

Home Meds (0): None Problems (0): None CC: Headache Acuity: 2-Emergent Bed: 03 Patient 649 01 00:00

Best Practice  
Arrival Info  
Patient Location

HISTORY/ASSESSMENT  
Triage Start  
Chief Complaint  
Triage Note  
**Screening Tools**  
Triage Vitals  
Allergy Med & Lat  
Home Medications  
History  
Treatment PTA  
Triage Intervention  
Triage Complete

ADDITIONAL INFORMATION  
Lines/Drains/Airw...  
PCP  
Other Physician  
Pager Information  
Private Encounter  
Health Status

LWOT DISPO  
Dispo & Follow-Up

Screening Tools - Screening Tools

Time taken: 1548 9/21/2017

Values By

Travel

Within the last 30 days have you traveled/lived outside of the U.S.? ☐ Yes ☒ No

Flu Symptoms

Presenting with Flu Symptoms? ☐ Yes ☒ No

TB Screen

Unexplained Weight Loss ☐ 0=No ☐ 1=Yes more than 3mos

Night Sweats ☐ 0=No night sweats ☐ 1=Bed Moist in am

Persistent Cough ☐ 0=No ☐ 1=Yes

Wt/Hemoptysis ☐ 0=No ☐ 1=Recent Diag/Exposure

2-4 Consider Recautions

Resident Tracking Tool

Are you a temporary/seasonal resident? ☐ Yes ☒ No

What is your approximate length of stay? ☐ 0-3 months ☐ 3-6 months ☐ 6-9 months

Do you have a primary care provider? ☐ Yes ☒ No

Restore Close F9 Cancel

## Appendix B. Training Alert

October 24, 2017

## TRAINING ALERT

### Resident Tracking Tool—HER Only

**Issue:** How can we identify the patients that are season residents that do not have a primary care provider locally in Lee County?

**Workflow:**

- Triage Navigator
  - ⇒ Resident Tracking Documentation added for HER only
- Triage Summary Report
  - ⇒ It will appear if documented
- ED Schedulers are going to follow up on these patients to try and get them scheduled with a local PCP

**BestPractice**

- Arrival Info
- Patient Location
- HISTORY/ASSESSMENT
- Triage Start
- Chief Complaint
- Triage Note
- Screening Tools
- Resident Tracking**
- Triage Vitals
- Allergy Med & Latex
- Home Medications
- History
- CD/Don Status

Resident Tracking

[+ New Reading](#)

**ED from 10/11/2017 in HealthPark Emergency**  
10/23/17 1007

**Resident Tracking Tool**

Are you a temporary/seasonal resident? **Yes**

What is your approximate length of stay? **3-6 months**

Do you have a PCP in Lee County? **No**

**Summary**

[ED Triage Report](#) | [ED Charge Summary](#) | [LINKS TRIAGE SUMMARY](#) | [Report](#)

**ED TRIAGE SUMMARY**

Canada, Candice #40576386 (MAR: 6855486) (45 y.o. F) PCP: **20649007**

DOB: 10/11/1972 | PT CLASS: Emergency | ACCT CLASS: Emergency

**Patient Information**

Patient Name: Canada, Candice | Sex: Female | DOB: 10/11/1972

MRN: 1717616 | PHYSICIAN: **1007117**

**ED Arrival Information**

Encounter: Arrival | Acuity: **Acute** | Means of Arrival: Walk-in | Escorted By: **Emergency**

Arrival Complaint: **Wheeze**

**Resident Tracking (10/11/17 MAR: 6855486)**

**ED RESIDENT TRACKING TOOL**

Are you a temporary/seasonal resident? **Yes**

What is your approximate length of stay? **3-6 months**

Do you have a PCP in Lee County? **No**

**TRIAGE INFORMATION**

Chief Complaint: **None**

**Reason:** To encourage the seasonal residents to see a local primary care provider for there medical needs during their time in Florida.

Figure 2.

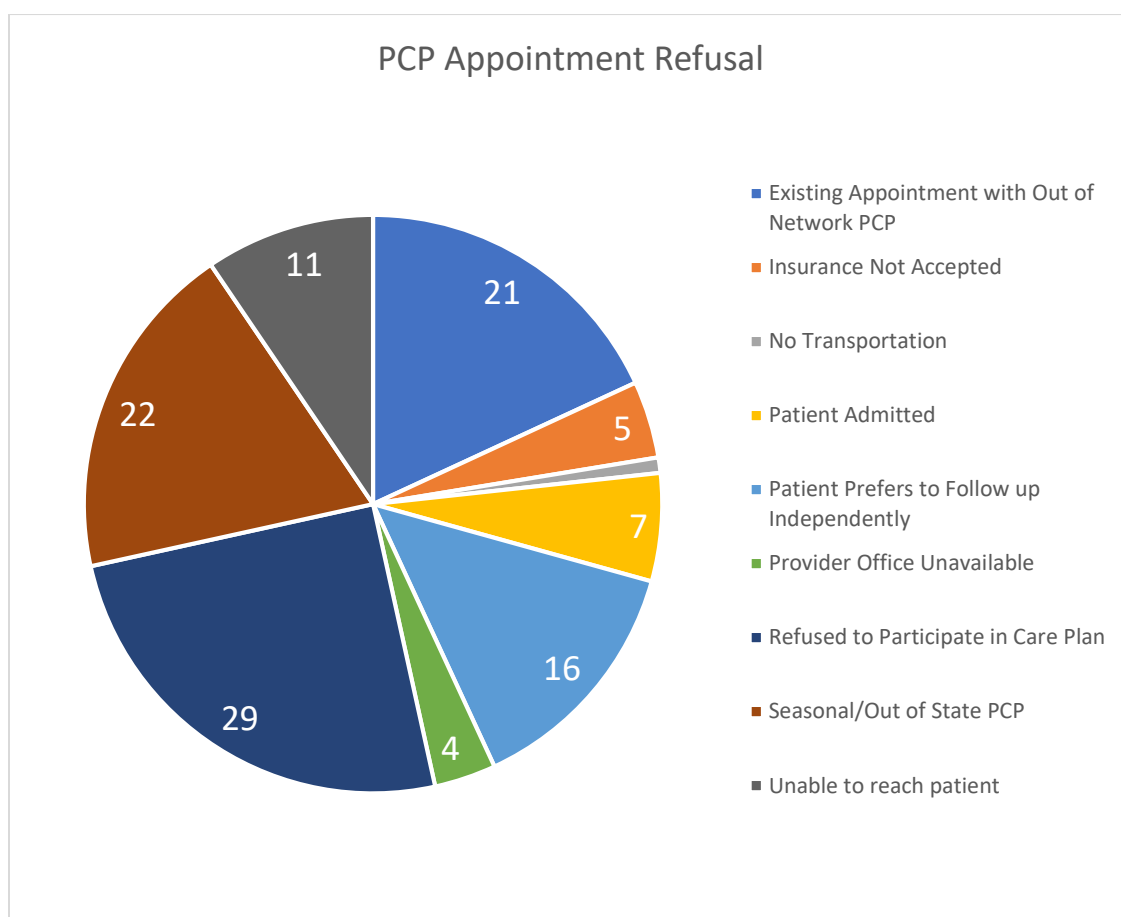


Figure 3. Seasonal Length of Stay

